

W05132

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**Analytical Data Package Prepared For
Fluor Hanford Inc.**

Radiochemical Analysis By

STL Richland

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: STLRL

Data Package Contains _____ Pages

Report No.: 34962

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W05132	R07-007	B1ML84	J7C050150-1	JQGRV1AA	9JQGRV10	7064434
		B1ML84	J7C050150-1	JQGRV3AD	9JQGRV30	7099332
		B1ML85	J7C050150-2	JQGR61AA	9JQGR610	7064434
		B1ML85	J7C050150-2	JQGR64AD	9JQGR640	7099332
		B1ML86	J7C050150-3	JQGR71AA	9JQGR710	7064434
		B1ML86	J7C050150-3	JQGR74AD	9JQGR740	7099332
		B1ML87	J7C050150-4	JQGTC1AA	9JQGTC10	7064434
		B1ML87	J7C050150-4	JQGTC3AD	9JQGTC30	7099332
		B1ML88	J7C050150-5	JQGTH1AA	9JQGTH10	7064434
		B1ML88	J7C050150-5	JQGTH3AD	9JQGTH30	7099332
		B1ML89	J7C050150-6	JQGTP1AA	9JQGTP10	7064434
		B1ML89	J7C050150-6	JQGTP3AD	9JQGTP30	7099332
		B1ML90	J7C050150-7	JQGTT1AA	9JQGTT10	7064434
		B1ML90	J7C050150-7	JQGTT3AD	9JQGTT30	7099332
		B1MLB0	J7C050150-8	JQGT01AA	9JQGT010	7064434
		B1MLB0	J7C050150-8	JQGT04AD	9JQGT040	7099332





STL

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Certificate of Analysis

Fluor Hanford
P.O. Box 1000, T6-03
Richland, WA 99352

April 16, 2007

Attention: John Trechter

SAF Number	:	R07-007
Date SDG Closed	:	March 2, 2007
Number of Samples	:	Eight (8)
Sample Type	:	Soil
SDG Number	:	W05132
Data Deliverable	:	15/15 Day

CASE NARRATIVE

I. Introduction

On March 2, 2007 eight samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned to lot J7C050150 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

FH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1ML84	JQGRV	SOIL	3/2/07
B1ML85	JQGR6	SOIL	3/2/07
B1ML86	JQGR7	SOIL	3/2/07
B1ML87	JQGTC	SOIL	3/2/07
B1ML88	JQGTH	SOIL	3/2/07
B1ML89	JQGTP	SOIL	3/2/07
B1ML90	JQGTT	SOIL	3/2/07
B1MLB0	JQGT0	SOIL	3/2/07

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

April 16, 2007

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy
Plutonium-241 by method RICH-RC-5010
Liquid Scintillation Counting
Nickle 63 by LCS

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Plutonium-241 by method RICH-RC-5010:

The samples were reanalyzed several times due to low LCS yields. The instruments were recalibrated and verified. All aspects of the analysis were inspected. The final run produced acceptable matrix spike and acceptable reagents LCS's three out of four times. Except as noted the LCS, batch blank, samples and sample duplicate (B1ML84) were all within acceptance limits.

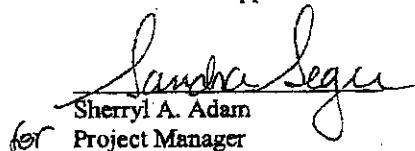
Liquid Scintillation Counting

Nickle 63 by LCS:

The LCS, batch blank, samples and sample duplicate (B1ML85) were all within acceptance limits.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:


for
Sherry A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5006
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,\dots)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <i>u_c Combined Uncertainty</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u_c</i> the <i>combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \sqrt{2 * (BkgndCnt/BkgndCntMin) / SCntMin}) * (\text{ConvFct} / (\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{(BkgndCnt/BkgndCntMin) / SCntMin}) + 2.71 / SCntMin) * (\text{ConvFct} / (\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D)/[\sqrt{(TPUs^2 + TPUd^2)}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary
STL Richland STLRL
 Ordered by Client Sample ID, Batch No.

Date: 16-Apr-07

Report No.: 34962

SDG No: W05132

Client ID	Work Order Number	Parameter	Result +/- Uncertainty (2s)	Qual	Units	Yield	MDC/MDA	RPD
B1ML84	JQGRV1AA	NI-63	3.19E+00 +/- 3.64E+00	U	pCi/g	98%	5.00E+00	
B1ML84	JQGRV3AD	PU-241	-1.63E-01 +/- 1.33E+00	U	pCi/g	65%	2.94E+00	
B1ML84 DUP	JQGRV3AG	PU-241	1.57E-01 +/- 9.90E-01	U	pCi/g	83%	2.16E+00 -9414.0	
B1ML85	JQGR61AA	NI-63	1.78E-01 +/- 3.93E+00	U	pCi/g	93%	5.68E+00	
B1ML85	JQGR64AD	PU-241	-2.71E-01 +/- 1.72E+00	U	pCi/g	46%	3.79E+00	
B1ML85 DUP	JQGR61AF	NI-63	2.66E+00 +/- 3.74E+00	U	pCi/g	98%	5.19E+00 174.9	
B1ML86	JQGR71AA	NI-63	3.63E+00 +/- 3.86E+00	U	pCi/g	100%	5.29E+00	
B1ML86	JQGR74AD	PU-241	1.62E-01 +/- 1.49E+00	U	pCi/g	57%	3.27E+00	
B1ML87	JQGTC1AA	NI-63	7.66E-01 +/- 3.41E+00	U	pCi/g	100%	4.88E+00	
B1ML87	JQGTC3AD	PU-241	-1.70E+00 +/- 2.65E+00	U	pCi/g	31%	5.93E+00	
B1ML88	JQGTH1AA	NI-63	1.87E-01 +/- 3.26E+00	U	pCi/g	100%	4.73E+00	
B1ML88	JQGTH3AD	PU-241	-8.91E-02 +/- 9.69E-01	U	pCi/g	84%	2.13E+00	
B1ML89	JQGTP1AA	NI-63	8.67E-01 +/- 3.58E+00	U	pCi/g	99%	5.12E+00	
B1ML89	JQGTP3AD	PU-241	-2.19E-01 +/- 1.11E+00	U	pCi/g	76%	2.45E+00	
B1ML90	JQGTT1AA	NI-63	1.06E+00 +/- 3.62E+00	U	pCi/g	95%	5.16E+00	
B1ML90	JQGTT3AD	PU-241	-6.81E-01 +/- 1.05E+00	U	pCi/g	76%	2.36E+00	
B1MLB0	JQGT01AA	NI-63	2.07E+00 +/- 3.80E+00	U	pCi/g	99%	5.32E+00	
B1MLB0	JQGT04AD	PU-241	-4.00E-01 +/- 1.04E+00	U	pCi/g	78%	2.32E+00	

Number of Results: 18

STL Richland RPD - Relative Percent Difference.
 rptSTLRchSaSum U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by
 V5.1 A2002 gamma scan software.

QC Results Summary
STL Richland STLRL
Ordered by QC Type, Batch No.

Date: 16-Apr-07

Report No. : 34962

SDG No.: W05132

QC Type	Work Order Number	Parameter	Result +/- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC MDA
BLANK QC	JQG5P1AA	NI-63	7.17E-01 +/- 3.41E+00	U	pCi/g	97%			4.89E+00
BLANK QC	JTK1N1AA	PU-241	-2.63E-02 +/- 9.52E-01	U	pCi/g	91%			2.09E+00
BLANK QC	JTK1N1AD	PU-241	1.05E+00 +/- 9.62E-01	U	pCi/g	91%			2.03E+00
LCS	JQG5P1AC	NI-63	4.20E+02 +/- 4.10E+01		pCi/g	98%	75%	-0.2	4.97E+00
LCS	JTK1N1AC	PU-241	1.95E+02 +/- 1.16E+01		pCi/g	85%	84%	-0.2	2.23E+00
LCS	JTK1N1AE	PU-241	1.68E+02 +/- 1.01E+01		pCi/g	70%	76%	-0.2	2.58E+00

Number of Results: 6

STL Richland Bias = (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSum U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by
 V5.1 A2002 gamma scan software.

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 8:35:00 AM

Lot-Sample No.: J7C050150-1

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML84

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7084434	Work Order: JQGRV1AA				Report DB ID: 9JQGRV10							
NI-63	3.19E+00	U	2.2E+00	3.6E+00	5.00E+00	pCi/g	98%	0.64	3/14/07 10:13 a	0.27	G	NI63_LSC
					2.42E+00	3.00E+01	(1.8)					LSC3
Batch: 7099332	Work Order: JQGRV3AD				Report DB ID: 9JQGRV30							
PU-241	-1.63E-01	U	1.2E+00	1.3E+00	2.94E+00	pCi/g	65%	-0.06	4/14/07 05:05 a	1.0	G	RICHRC5010
					1.42E+00	1.50E+01	-0.25					LSC4

Number of Results: 2

Comments:

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 9:40:00 AM

Lot-Sample No.: J7C050150-2

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML85

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count	Total	MDC/MDA,	Rpt Unit,	Yield	Rst/MDC,	Analysis,	Total Sa	Aliquot	Analy Method,
			Error (2 s)	Uncert (2 s)	Action Lcv	Lc	CRDL(RL)	Rst/TotUncert	Prep Date	Size	Size	Primary Detector
Batch: 7064434	Work Order: JQGGR61AA				Report DB ID: 9JQGR610							
NI-63	1.78E-01	U	2.4E+00	3.9E+00	5.68E+00	pCi/g	93%	0.03	3/14/07 11:55 a	0.25	G	NI63_LSC
					2.75E+00	3.00E+01	0.09					LSC3
Batch: 7098332	Work Order: JQGGR64AD				Report DB ID: 9JQGR640							
PU-241	-2.71E-01	U	1.6E+00	1.7E+00	3.78E+00	pCi/g	46%	-0.07	4/14/07 08:30 a	1.08	G	RICHRC5010
					1.82E+00	1.50E+01	-0.32					LSC4

Number of Results: 2

Comments:

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland
 Lot-Sample No.: J7C050150-3
 Client Sample ID: B1ML86

SDG: W05132
 Report No.: 34962
 COC No.: R07-007-005

Collection Date: 3/1/2007 10:25:00 AM
 Received Date: 3/2/2007 12:25:00 PM
 Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7064434	Work Order: JQGR71AA			Report DB ID: 9JQGR710							
NI-63	3.63E+00	U	2.3E+00	3.9E+00	5.29E+00 pCi/g	100%	0.69	3/14/07 03:21 p	0.25	G	N63_LSC
					2.56E+00	3.00E+01	(1.9)				LSC3
Batch: 7099332	Work Order: JQGR74AD			Report DB ID: 9JQGR740							
PU-241	1.62E-01	U	1.4E+00	1.5E+00	3.27E+00 pCi/g	57%	0.05	4/14/07 10:12 a	1.02	G	RICHRC5010
					1.57E+00	1.50E+01	0.22				LSC4

Number of Results: 2

Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt8TLRch8Sample U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not Identified by gamma scan software.
 V5.1 A2002

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 12:32:00 PM

Lot-Sample No.: J7C050150-4

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML87

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total So Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7084434	Work Order: JQGTC1AA				Report DB ID: 9JQGTC10							
NI-63	7.60E-01	U	2.0E+00	3.4E+00	4.88E+00	pCi/g	100%	0.16	3/14/07 05:03 p	0.27	G	NI63_LSC
					2.36E+00	3.00E+01	0.45					LSC3
Batch: 7099332	Work Order: JQGTC3AD				Report DB ID: 9JQGTC30							
PU-241	-1.70E+00	U	2.4E+00	2.7E+00	5.93E+00	pCi/g	31%	-0.29	4/14/07 11:55 a	1.03	G	RICHRC5010
					2.86E+00	1.50E+01	-(1.3)					LSC4

Number of Results: 2

Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.
 V5.1 A2002

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 8:35:00 AM

Lot-Sample No.: J7C050150-5

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML88

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC(MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7064434	Work Order: JQGTH1AA				Report DB ID: 9JQGTH10							
NI-63	1.87E-01	U	2.0E+00	3.3E+00	4.73E+00	pCi/g	100%	0.04	3/14/07 06:46 p	0.28	G	Ni63_LSC
					2.29E+00	3.00E+01		0.11				LSC3
Batch: 7099332	Work Order: JQGTH3AD				Report DB ID: 9JQGTH30							
PU-241	-8.91E-02	U	8.8E-01	9.7E-01	2.13E+00	pCi/g	84%	-0.04	4/14/07 01:37 p	1.06	G	RICHRC6010
					1.03E+00	1.50E+01		-0.18				LSC4

Number of Results: 2

Comments:

STL Richland MDC(MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not Identified by gamma scan software.
 V5.1 A2002

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 2/28/2007 7:30:00 AM

Lot-Sample No.: J7C050150-6

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML89

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count	Total	MDC MDA,	Rpt Unit,	Yield	Rst/MDC,	Analysis,	Total Sa	Aliquot	Analy Method,
		Qual	Uncert(2 s)	Action Lev	Lc	CRDL(RL)	Rst/TotUncert	Prep Date	Size	Size	Primacy Detector
Batch: 7064434	Work Order: JQGTP1AA			Report DB ID: 9JQGTP10							
NI-63	8.67E-01	U	2.1E+00	3.6E+00	5.12E+00	pCi/g	99%	0.17	3/14/07 08:29 p	0.26	Ni63_LSC
					2.48E+00	3.00E+01	0.49			G	LSC3
Batch: 7099332	Work Order: JQGTP3AD			Report DB ID: 9JQGTP30							
PU-241	-2.19E-01	U	1.0E+00	1.1E+00	2.45E+00	pCi/g	76%	-0.09	4/14/07 03:20 p	1.02	RICHRC5010
					1.10E+00	1.50E+01	-0.39			G	LSC4

Number of Results: 2

Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for bit not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.
 V5.1 A2002

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 8:42:00 AM

Lot-Sample No.: J7C050150-7

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML90

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count	Uncert(2 s)	Total Uncert(2 s)	MDC(MDA, Action Lev)	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sg Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7064434	Work Order: JQGTT1AA				Report DB ID: SJQGTT10							
NI-63	1.06E+00	U	2.2E+00	3.6E+00	5.16E+00	pCi/g	95%	0.2	3/14/07 10:11 p	0.27	G	NI63_LSC
					2.50E+00	3.00E+01	0.58					LSC3
Batch: 7099332	Work Order: JQGTT3AD				Report DB ID: SJQGTT30							
PU-241	-6.81E-01	U	9.5E-01	1.1E+00	2.36E+00	pCi/g	76%	-0.29	4/14/07 05:02 p	1.06	G	RICHRC5010
					1.13E+00	1.50E+01	-(1.3)					LSC4

Number of Results: 2

Comments:

FORM I
SAMPLE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 1:45:00 PM

Lot-Sample No.: J7C050150-8

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1MLB0

COC No.: R07-007-005

Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUncst	Analysis, Prop Date	Total Sa Size	Allquot Size	Analy Method, Primary Detector
Batch: 7084434	Work Order: JQGT01AA			Report DB ID: 9JQGT010							
NI-63	2.07E+00	U	2.3E+00	3.8E+00	5.32E+00	pCi/g	99%	0.39	3/14/07 11:54 p	0.25	Ni63_LSG
					2.58E+00	3.00E+01	(1.1)			G	LSC3
Batch: 7099332	Work Order: JQGT04AD			Report DB ID: 9JQGT040							
PU-241	-4.00E-01	U	9.5E-01	1.0E+00	2.32E+00	pCi/g	78%	-0.17	4/14/07 06:44 p	1.05	RICHRC9010
					1.11E+00	1.50E+01	-0.77			G	LSC4

Number of Results: 2

Comments:

STL Richland MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.
 V5.1 A2002

FORM II
DUPLICATE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 8:35:00 AM

Lot-Sample No.: J7C050150-1

Report No.: 34982

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML84 DUP

COC No.: R07-007-005

Matrix: SOIL

Parameter	Result, Orig Rst	Result, Qual	Count	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Ret/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7099332	Work Order: JQGRV3AG			Report DB ID: JQGRV3GR		Orig Sa DB ID: 9JQGRV30						
PU-241	1.57E-01	U	9.0E-01	9.0E-01	2.16E+00	pCi/g	83%	0.07	4/14/07 06:48 a	1.06	RICHRC5010	
	-1.63E-01	U	RPD	-9414.0		1.50E+01		0.32		G	LSC4	

Number of Results: 1

Comments:

STL Richland RPD - Relative Percent Difference.
 rptSTLRchDupV5.1 MDC|MDA,Le - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 A2002 U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II
DUPLICATE RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Collection Date: 3/1/2007 9:40:00 AM

Lot-Sample No.: J7C050150-2

Report No.: 34962

Received Date: 3/2/2007 12:25:00 PM

Client Sample ID: B1ML85 DUP

COC No.: R07-007-005

Matrix: SOIL

Parameter	Result, Orig Rst	Count Qual	Total Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUncrt	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7084434	Work Order: JQGR61AF			Report DB ID: JQGR61FR		Orig Sa DB ID: 9JQGR610						
NI-63	2.66E+00	U	2.2E+00	3.7E+00	5.19E+00	pCi/g	98%	0.51	3/14/07 01:38 p	0.26	Ni63_LSC	
	1.78E-01	U	RPD	174.9			3.00E+01	(1.4)		G	LSC3	

Number of Results: 1

Comments:

STL Richland RPD - Relative Percent Difference.

rptSTLRchDupV5.1 MDC|MDA,Le - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

A2002 U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II
BLANK RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Lot-Sample No.: J7C050000-434

Report No.: 34962

Matrix: SOIL

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7084434	Work Order: JQG5P1AA			Report DB ID: JQG5P1AB								
NI-03	7.17E-01	U	2.0E+00	3.4E+00	4.89E+00	pCi/g	97%	0.15	3/15/07 01:37 a	0.28	G	NI63_LSC LSC3

Number of Results: 1

Comments:

FORM II
BLANK RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Lot-Sample No.: J7D090000-332

Report No. : 34962

Matrix: SOIL

Parameter	Result	Qual	Ceaus Error (2 s)	Total Uncert(2 s)	MDC MDA	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Allquot Size	Analy Method, Primary Detector
Batch: 7099332	Work Order: JTK1N1AA				Report DB ID: JTK1N1AB							
PU-241	-2.63E-02	U	8.7E-01	9.5E-01	2.09E+00	pCi/g	91%	-0.01	4/14/07 08:27 p	1.0	G	RICHRC5010 LSC4
					1.01E+00	1.50E+01		-0.06				
Batch: 7099332	Work Order: JTK1N1AD				Report DB ID: JTK1N1DX							
PU-241	1.05E+00	U	8.8E-01	9.6E-01	2.03E+00	pCi/g	91%	0.52	4/15/07 01:34 a	1.03	G	RICHRC5010 LSC4
					0.79E-01	1.50E+01		(2.2)				

Number of Results: 2

Comments:

FORM II
LCS RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Lot-Sample No.: J7C050000-434

Report No.: 34962

Matrix: SOIL

Parameter	Result Qual	Count Error (2 s)	Total Uncert (2 s)	MDC MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 7064434	Work Order: JQG5P1AC			Report DB ID: JQG5P1CS								
NI-63	4.20E+02	7.2E+00	4.1E+01	4.97E+00	pCi/g	98.29%	5.59E+02	1.88E+01	75%	3/15/07 03:19 a	0.27	NI63_LSC LSC3

Number of Results: 1

Comments:

FORM II
LCS RESULTS

Date: 16-Apr-07

Lab Name: STL Richland

SDG: W05132

Lot-Sample No.: J7D090000-332

Report No.: 34962

Matrix: SOIL

Parameter	Result	Count	Total	Report	Yield	Expected	Expected	Recovery,	Analysis,	Aliquot	Analy Method,
	Qual	Error (2 s)	Uncert(2 s)	MDC MDA	Unit		Uncert	Bias	Prep Date	Size	Primary Detector
Batch: 7099332	Work Order: JTK1N1AC		Report DB ID: JTK1N1CS								
PU-241	1.95E+02	3.6E+00	1.2E+01	2.23E+00	pCi/g	85.00%	2.32E+02	8.26E+00	84%	4/14/07 10:09 p	1.0
				Rec Limits:		70.	130.	-0.2		G	LSC4
Batch: 7099332	Work Order: JTK1N1AE		Report DB ID: JTK1N1EM								
PU-241	1.68E+02	3.6E+00	1.0E+01	2.58E+00	pCi/g	70.00%	2.20E+02	7.83E+00	76%	4/15/07 03:17 a	1.05
				Rec Limits:		70.	130.	-0.2		G	LSC4

Number of Results: 2

Comments:

SEVERN
STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/16/2007 1:47:27 PM

Lot No., Due Date: J7C050150; 03/19/2007
Client, Site: 108302; FLUOR- SOILS Hanford Site
QC Batch No., Method Test: 7099332; RPU241 Pu-241 by LSC
SDG, Matrix: W05132; SOIL

1.0 ICOC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes	No	N/A
4.2 Were analysis volumes entered correctly?	Yes	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A
5.2 Are all required forms filled out?	Yes	No	N/A
5.3 Was the correct methodology used?	Yes	No	N/A
5.4 Was transcription checked?	Yes	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A
5.6 Are worksheet entries complete and correct?	Yes	No	N/A
6.0 Comments or any No response:			
NCM 10-09734			

First Level Review

Bob Autzen

Date

4/16/07

STL Richland
SAS-PADCALC4.8.26
STL RICHLAND

Page 1

SEVERN
TRENT

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number:

7099332
W05132

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?			
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See N CM

Second Level Review

Daryl A. Adam

Date: 4-16-07

Clouseau Nonconformance Memo



NCM #: **10-09734**
 NCM Initiated By: Lisa Antonson
 Date Opened: 04/16/2007
 Date Closed:

Classification: **Anomaly**
 Status: **GLREVIEW**
 Production Area: Environmental - Prep
 Tests: Ni-63 by LSC, Pu-241 by LSC, Pulso by ALP
 Lot #'s (Sample #'s): J7C050150 (1,2,3,4,5,6,7,8),
 QC Batches: 7064432, 7064433, 7064434,
 7071244, 7071248, 7082486,
 7082487, 7099328, 7099332

Nonconformance: Other (describe in detail)
 Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	04/16/2007	Samples were reanalyzed several times due to low LCS yields. Instruments were recalibrated and verified. All aspects of the analysis were inspected. The final run produced acceptable spiked matrix and acceptable reagent LCS's three out of the four times. Investigation continues.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	04/16/2007	Report data based on acceptable QC

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

Verified By	Due Date	Status	Notes
This section not yet completed by QA.			

Approval History

Date Approved	Approved By	Position
---------------	-------------	----------

SEVERN
TRENT STLData Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/15/2007 4:01:49 PM

Lot No., Due Date: J7C050150; 03/19/2007

Client, Site: 108302; FLUOR- SOILS Hanford Site

QC Batch No., Method Test: 7064434; RNI63 Ni-63 by LSC

SDG, Matrix: W05132; SOIL

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A



2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A



2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A



2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A



3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A



3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A



3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A



3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

**4.0 Raw Data**

4.1 Were results calculated in the correct units?

Yes No N/A



4.2 Were analysis volumes entered correctly?

Yes No N/A



4.3 Were Yields entered correctly?

Yes No N/A



4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A



4.5 Were raw counts reviewed for anomalies?

Yes No N/A

**5.0 Other**

5.1 Are all nonconformances included and noted?

Yes No N/A



5.2 Are all required forms filled out?

Yes No N/A



5.3 Was the correct methodology used?

Yes No N/A



5.4 Was transcription checked?

Yes No N/A



5.5 Were all calculations checked at a minimum frequency?

Yes No N/A



5.6 Are worksheet entries complete and correct?

Yes No N/A



6.0 Comments on any No response:

First Level Review

Pavel Anderson

Date 3-15-07

STL Richland

QAS-RADCALCV4.8.26

STL RICHLAND

Page 1

SEVERN
TRENT

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number:

706-4434
W05132

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?		✓	
3. Was the correct methodology used?		✓	
4. Was transcription checked?		✓	
5. Were all calculations checked at a minimum frequency?		✓	
6. Were units checked?		✓	

Comments on any "No" response:

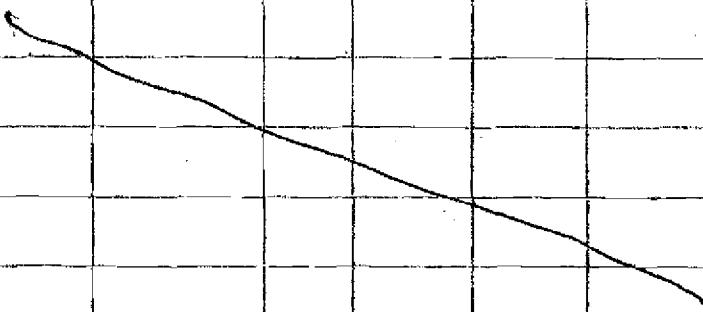
Second Level Review:

Sherry A Adam

Date: 3-20-07

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST					R07-007-005	PAGE 1 OF 3		
COLLECTOR HOGAN, JG		COMPANY CONTACT KLAGES, DL			TELEPHONE NO.	PROJECT COORDINATOR TRECHTER, JE		PRICE CODE BC	DATA TURNAROUND	
SAMPLING LOCATION 216-N-3		PROJECT DESIGNATION 200-CW-3 Operable Unit Test Pit Analyses				SAF NO. R07-007		AIR QUALITY <input type="checkbox"/>	15 Days / 15 Days	
TCI CHEST NO. GRP-07-007		FIELD LOGBOOK NO. HNF-N-507 3	CDA 122333ES20	METHOD OF SHIPMENT GOVERNMENT VEHICLE		JTC05015D 005132				
SHIPPED TO Severn Trent Incorporated, Richland		OPPOSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A		05-16-07	Due 04/14/07	31516	
MATRIX* OL = OTHER LIQUID OS = OTHER SOLID S = SOIL W = WATER	SPECIAL HANDLING AND/OR STORAGE			POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)						
SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS			PRESERVATION	
B1ML84		S	3-1-07	0835	1X60mL G/P	Nickel-63; <i>JQGRV</i>			None	
B1ML84		S		0835	1X60mL G/P	Plutonium-241;			None	
B1ML85		S		0940	1X60mL G/P	Nickel-63; <i>JQGR6</i>			None	
B1ML85		S		0940	1X60mL G/P	Plutonium-241;			None	
B1ML86		S		1025	1X60mL G/P	Nickel-63; <i>JQGR7</i>			None	
B1ML86		S		1025	1X60mL G/P	Plutonium-241;			None	
B1ML87		S		1232	1X60mL G/P	Nickel-63; <i>JQGTC</i>			None	
CHAIN OF POSSESSION					SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS			
RELINQUISHED BY/ REMOVED FROM <i>J.G. Hogan</i> Fluor Hanford	DATE/TIME/22	RECEIVED BY/STORED IN <i>Er Darby</i>	DATE/TIME/1225	** Reporting format the same as GPP, including QC. ** STL is to send a copy of chain of custody (COC) to John Trechter within 24 hours of sample receipt and copy ^CPP Sample Management mailbox.						
RELINQUISHED BY/ REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME							
RELINQUISHED BY/ REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The Fluor Hanford samplers shall provide copies of all field documents to Steve Trent. ** Final reports are to be uploaded into HEIS. ** Samples WILL NOT be taken using the multi-increment sampling technique.						
LABORATORY SECTION	RECEIVED BY	TITLE			DATE/TIME					
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY			DATE/TIME					

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST					R07-007-005	PAGE 2 OF 3		
COLLECTOR HOGAN, JG		COMPANY CONTACT KLAGES, DL			TELEPHONE NO.	PROJECT COORDINATOR TRECHTER, JE	PRICE CODE 8C	DATA TURNAROUND		
SAMPLING LOCATION 216-N-3		PROJECT DESIGNATION 200-CW-3 Operable Unit Test Pit Analyses			SAF NO. R07-007		AIR QUALITY <input type="checkbox"/>	15 Days / 15 Days		
ICE CHEST NO. <i>GRP-07-007</i>	FIELD LOGBOOK NO. <i>HNF-N-507 3</i>	COA 122333ES20	METHOD OF SHIPMENT GOVERNMENT VEHICLE	<i>JTC050150</i> <i>W05132 19</i>						
SHIPPED TO Seven Trent Incorporated, Richland	OFFSITE PROPERTY NO. <i>N/A</i>		BILL OF LADING/AIR BILL NO. <i>N/A</i>	<i>Due 03-12-07</i> <i>RJ31510</i>						
MATRIX: OL = OTHER LIQUID OS = OTHER SOLID S = SOIL W = WATER	SPECIAL HANDLING AND/OR STORAGE			POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)						
SAMPLE NO.	LAB ID	MATRIX	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS			PRESERVATION	
B1ML87		S	3-1-07	1232	1X60mL G/P	Plutonium-241;			None	
B1ML88		S		0835	1X60mL G/P	Nickel-63; <i>JQGTH</i>			None	
B1ML88		S		0835	1X60mL G/P	Plutonium-241;			None	
B1ML89		S	2-28-07	0730	1X60mL G/P	Nickel-63; <i>JQGTP</i>			None	
B1ML89		S	2-28-07	0730	1X60mL G/P	Plutonium-241;			None	
B1ML90		S	3-1-07	0842	1X60mL G/P	Nickel-63; <i>JQGTT</i>			None	
B1ML90		S	3-1-07	0842	1X60mL G/P	Plutonium-241;			None	
CHAIN OF POSSESSION					SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS			
RELINQUISHED BY/REMOVED FROM <i>J.G. Hogan</i>		DATE/TIME <i>MAR 02 2007</i>	RECEIVED BY/STORED IN <i>E. Darby</i>		DATE/TIME <i>MAR 02 2007</i>	<p align="center"><i>1225</i></p> ** Reporting format the same as GPP, Including QC. ** STL is to send a copy of chain of custody (COC) to John Trechter within 24 hours of sample receipt and copy ^CPP Sample Management mailbox.				
RELINQUISHED BY/REMOVED FROM		DATE/TIME	RECEIVED BY/STORED IN		DATE/TIME					
RELINQUISHED BY/REMOVED FROM		DATE/TIME	RECEIVED BY/STORED IN		DATE/TIME	** The Fluor Hanford samplers shall provide copies of all field documents to Steve Trent. ** Final reports are to be uploaded into HEIS. ** Samples WILL NOT be taken using the multi-increment sampling technique.				
LABORATORY SECTION	RECEIVED BY					TITLE	DATE/TIME			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD					DISPOSED BY	DATE/TIME			

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST					R07-007-005	PAGE 3 OF 3	
COLLECTOR HOGAN, JG		COMPANY CONTACT KLAGES, DL			TELEPHONE NO.	PROJECT COORDINATOR TRECHTER, JE		PRICE CODE 8C	DATA TURNAROUND
SAMPLING LOCATION 216-N-3		PROJECT DESIGNATION 200-CW-3 Operable Unit Test Pit Analyses				SAF NO. R07-007		AIR QUALITY <input type="checkbox"/>	15 Days / 15 Days
ICE CHEST NO. GRP-07-007		FIELD LOGBOOK NO. HNF-N-507 3	COA 122339ES20		METHOD OF SHIPMENT GOVERNMENT VEHICLE		<i>J7C050150 WD5132 19 Due 03-16-07 FW 31514</i>		
SHIPPED TO Severn Trent Incorporated, Richland		OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A				
MATRIX* OL = OTHER LIQUID OS = OTHER SOLID S = SOIL W = WATER	SPECIAL HANDLING AND/OR STORAGE				POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)				
SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS			PRESERVATION
BIMLBO		S	3-1-07	1345	1X60mL G/P	Nickel-63; <i>JQGTO</i>			None
BIMLBO		S	3-1-07	1345	1X60mL G/P	Plutonium-241;			None
									
CHAIN OF POSSESSION			SIGN/ PRINT NAMES			SPECIAL INSTRUCTIONS			
RELINQUISHED BY/REMOVED FROM J.G. Hogan Fluor Hanford	DATE/TIME <i>1225</i> <i>JTH</i>	RECEIVED BY/STORED IN <i>J. Daily</i>	DATE/TIME <i>1225</i> <i>JAD</i>	** Reporting format the same as GPP, including QC. ** STL is to send a copy of chain of custody (COC) to John Trechter within 24 hours of sample receipt and copy ^CPP Sample Management mailbox.					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The Fluor Hanford samplers shall provide copies of all field documents to Steve Trent. ** Final reports are to be uploaded into HEIS. ** Samples WILL NOT be taken using the multi-increment sampling technique.					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME						
LABORATORY SECTION	RECEIVED BY _____ TITLE _____					DATE/TIME			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD					DISPOSED BY _____	DATE/TIME		

SEVERN
TRENT

STL

Sample Check-in List

Date/Time Received: 3/2/07 1000

Client: PLH SDG #: W05182 NA [] SAF #: R07007 NA []

Work Order Number: JTC050150 Chain of Custody # R07-007-005

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes No []
2. Custody Seals dated and signed? NA [] Yes No []
3. Chain of Custody record present? Yes No []
4. Cooler temperature: NA ✓ 5. Vermiculite/packing materials is NA Wet [] Dry []
6. Number of samples in shipping container: 8
16 x 100 ml
NA [] Yes [] No []
7. Sample holding times exceeded? Soil
hazard labels
appropriate samples labels
8. Samples have:
tape
custody seals
9. Samples are:
✓ in good condition
broken
leaking
have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA pH<2 [] pH>2 [] adjusted pH []
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes No []
12. Were any anomalies identified in sample receipt? Yes [] No
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eric Dally Date: 3/2/07 1000

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

SEVERN
TRENT

STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 3/9/07

CUSTOMER fluor

ANALYSIS Puzzu

MATRIX Soil

LOT NUMBER J7C050150

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7082484

NEW BATCH NUMBER 7099332

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) <u>Oil</u>	<u>gated</u> <u>201</u>
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch

4/10/2007 10:49:32 AM		Sample Preparation/Analysis				Balance Id:1120373922																																																																																																																																																																																																																										
108302, Fluor Hanford Inc Hanford Inc		Flour	AH Pu/241 PrpRC5013/5077, SepRC5010(5039) SP Plutonium-241 by Liquid Scint		PRIORITY		Pipet #: _____																																																																																																																																																																																																																									
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Batch: 7099332 SOIL SEQ Batch, Test: None		pCv/g	PM, Quote: SA , 50639				Sep2 DT/Tm Tech: _____																																																																																																																																																																																																																									
<table border="1"> <thead> <tr> <th>Work Order, Lot, Sample DateTime</th> <th>Total Amt/Unit</th> <th>Initial Aliquot Amt/Unit</th> <th>QC Tracer Prep Date</th> <th>Count Time Min</th> <th>Detector Id</th> <th>Count On Off (24hr) Circle</th> <th>CR Analyst, Init/Date</th> <th>Comments:</th> </tr> </thead> <tbody> <tr><td>1 JQGRV-3-AD</td><td>1.00g,in</td><td></td><td></td><td>100</td><td></td><td></td><td></td><td></td></tr> <tr><td>J7C050150-1-SAMP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03/01/2007 08:35</td><td></td><td>AmtRec: 2X100G</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td>2 JOGRV-3-AG-X</td><td>1.06g,in</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td>J7C050160-1-DUP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03/01/2007 08:35</td><td></td><td>AmtRec: 2X100G</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td>3 JQGR6-4-AD</td><td>1.09g,in</td><td></td><td></td><td>4/10/17</td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td>J7C050150-2-SAMP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03/01/2007 09:40</td><td></td><td>AmtRec: 2X100G</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td>4 JOGR7-4-AD</td><td>1.02g,in</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td>J7C050150-3-SAMP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03/01/2007 10:25</td><td></td><td>AmtRec: 2XJAR60MLG</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td>5 JOGTC-3-AD</td><td>1.03g,in</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td>J7C050150-4-SAMP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03/01/2007 12:32</td><td></td><td>AmtRec: 2XJAR60MLG</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td>6 JQGTH-3-AD</td><td>1.06g,in</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td>J7C050150-5-SAMP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>03/01/2007 08:35</td><td></td><td>AmtRec: 2XJAR60MLG</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td>7 JOGTP-3-AD</td><td>1.02g,in</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td>J7C050150-6-SAMP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02/28/2007 07:30</td><td></td><td>AmtRec: 2XJAR60MLG</td><td>#Containers: 2</td><td></td><td></td><td></td><td>Scr:</td><td>Alpha:</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Beta:</td></tr> <tr><td colspan="2">STL Richland Richland Wa.</td><td colspan="4">Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added</td><td colspan="2">ISV - Insufficient Volume for Analysis</td><td>WO Cnt: 7 Prep_SamplePrep v4.8.26</td></tr> </tbody> </table>									Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	1 JQGRV-3-AD	1.00g,in			100					J7C050150-1-SAMP									03/01/2007 08:35		AmtRec: 2X100G	#Containers: 2				Scr:	Alpha:	2 JOGRV-3-AG-X	1.06g,in							Beta:	J7C050160-1-DUP									03/01/2007 08:35		AmtRec: 2X100G	#Containers: 2				Scr:	Alpha:	3 JQGR6-4-AD	1.09g,in			4/10/17				Beta:	J7C050150-2-SAMP									03/01/2007 09:40		AmtRec: 2X100G	#Containers: 2				Scr:	Alpha:	4 JOGR7-4-AD	1.02g,in							Beta:	J7C050150-3-SAMP									03/01/2007 10:25		AmtRec: 2XJAR60MLG	#Containers: 2				Scr:	Alpha:	5 JOGTC-3-AD	1.03g,in							Beta:	J7C050150-4-SAMP									03/01/2007 12:32		AmtRec: 2XJAR60MLG	#Containers: 2				Scr:	Alpha:	6 JQGTH-3-AD	1.06g,in							Beta:	J7C050150-5-SAMP									03/01/2007 08:35		AmtRec: 2XJAR60MLG	#Containers: 2				Scr:	Alpha:	7 JOGTP-3-AD	1.02g,in							Beta:	J7C050150-6-SAMP									02/28/2007 07:30		AmtRec: 2XJAR60MLG	#Containers: 2				Scr:	Alpha:									Beta:	STL Richland Richland Wa.		Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added				ISV - Insufficient Volume for Analysis		WO Cnt: 7 Prep_SamplePrep v4.8.26
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4/10/2007 10:49:34 AM 108302, Fluor Hanford Inc Hanford Inc		Sample Preparation/Analysis AH Pu/241 PrpRC5013/6077, SepRC5010(5039) SP Plutonium-241 by Liquid Scint SI CLIENT: HANFORD				Balance Id:1120373922 Pipet #: _____ Priority: Sep1 DT/Tm Tech: Sep2 DT/Tm Tech: Prep Tech: ,WoodT		
AnalyDueDate: 03/16/2007 Batch: 7099332 SOIL SEQ Batch, Test: None		pCi/g PM, Quote: SA , 50639						
Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
6 JQGTT-3-AD J7C050150-7-SAMP	1.06g,in			100				
03/01/2007 08:42	AmtRec: 2XJAR60MLG	#Containers: 2					Ser:	Alpha:
9 JQGT04-AD J7C050150-8-SAMP	1.06g,in							Beta:
03/01/2007 13:45	AmtRec: 2XJAR60MLG	#Containers: 2	410 51				Ser:	Alpha:
10 JTK1N-1-AA-B J7D090000-332-BLK	1.00g,in			88				Beta:
03/01/2007 08:35	AmtRec:	#Containers: 1					Ser:	Alpha:
11 JTK1N-1-AC-C J7D090000-332-LCS	1.00g,in	241B0014 04/09/07,rd 09/10/04,r						Beta:
03/01/2007 08:35	AmtRec:	#Containers: 1					Ser:	Alpha:
12 JTK1N-1-AD-BX J7D090000-332-MBLK	1.03g,in							Beta:
03/01/2007 08:35	AmtRec:	#Containers: 1					Ser:	Alpha:
13 JTK1N-1-AE-CM J7D090000-332-MLCS	1.05g,in	241B0015 04/08/07,rd 09/10/04,r						Beta:
03/01/2007 08:35	AmtRec:	#Containers: 1					Ser:	Alpha:
ISV - Insufficient Volume for Analysis								
STL Richland Richland Wa.		Key: In - Initial Amt, fi - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, r - Reference Dt, eo-Enrichment Cell, ct-Cocktailled Added				WO Cnt: 13 Prep_SamplePrep v4.8.26		

4/10/2007 10:49:40 AM

Sample Preparation/Analysis

Balance Id:1120373922

AnalyDueDate: 03/16/2007

AH Pu/241 PrpRC5013/5077, SepRC5010(5039)
SP Plutonium-241 by Liquid ScInt**PRIORITY**

Pipet #: _____

SI CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7099332

pCi/g

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments:

All Clients for Batch:
108302, Fluor Hanford Inc

Flour Hanford Inc

, SA , 50639

JQGRV3AD-SAMP Constituent List:

Pu-241	RDL:15	pCi/g	LCL:	UCL:	RPD:	Pu-242	RDL:	pCi/g	LCL:70	UCL:130	RPD:35
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JTK1N1AA-BLK:

Pu-241	RDL:15	pCi/g	LCL:	UCL:	RPD:	Pu-242	RDL:	pCi/g	LCL:70	UCL:130	RPD:35
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JTK1N1AC-LCS:

Pu-239	RDL:	pCi/g	LCL:70	UCL:130	RPD:35	Pu-241	RDL:15	pCi/g	LCL:70	UCL:130	RPD:35
Pu-242	RDL:	pCi/g	LCL:70	UCL:130	RPD:35						

JTK1N1AD-MBLK:

Pu-241	RDL:15	pCi/g	LCL:	UCL:	RPD:	Pu-242	RDL:	pCi/g	LCL:70	UCL:130	RPD:35
--------	--------	-------	------	------	------	--------	------	-------	--------	---------	--------

JTK1N1AH-MLCG:

PU-239	RDL:	pCi/g	LCL:70	UCL:130	RPD:35	Pu-241	RDL:15	pCi/g	LCL:70	UCL:130	RPD:35
Pu-242	RDL:	pCi/g	LCL:70	UCL:130	RPD:35						

JQGRV3AD-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JTK1N1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JTK1N1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JTK1N1AD-MBLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JTK1N1AH-MLCG:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, dl - Diluted Amt, si - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec - Enrichment Cell, ct - Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 13

Prep_SamplePrep v4.8.26

4/16/2007 1:46:12 PM

ICOC Fraction Transfer/Status Report

By Date: 4/16/2006, 4/21/2007, Batch: 7099332, User: *ALL Order By Date/Time/Accepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7099332					
AC		CalcC	WoodT	4/9/2007 6:27:11 PM	
SC			antonsenl	IsBatched	4/9/2007 1:58:56 PM
SC			WoodT	InPrep	4/9/2007 6:27:11 PM
SC			WoodT	Prep1C	4/10/2007 10:49:31 AM
SC			HarveyK	Sep1C	4/13/2007 3:35:24 PM
SC			DAWKINSO	InCnt1	4/13/2007 3:45:47 PM
SC			BlackCL	CalcC	4/16/2007 9:12:50 AM
AC			WoodT		4/10/2007 10:49:31
AC			HarveyK		4/13/2007 3:35:24 PM
AC			DAWKINSO		4/13/2007 3:45:47 PM
AC			BlackCL		4/16/2007 9:12:50

AC: Accepting Entity, SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCPackets v4.8.26

STL RICHLAND

Page 1

STL RICHLAND	3/8/2007 6:49:54 AM		Sample Preparation/Analysis				Balance Id:1120373922			
	108302, Fluor Hanford Inc Hanford Inc	, Flour	AF NI-63 PrpRC5013/5019, SepRC5069 S4 Nickel by ICP and Nickel-63 by Liquid Scint	PRICING		Pipet #:				
AnalyDueDate: 03/16/2007		SI CLIENT: HANFORD				Sep1 DT/Tm Tech:				
Batch: 7064434 SOIL		pCi/g	PM, Quote: SA , 50639				Sep2 DT/Tm Tech:			
SEQ Batch, Test: None							Prep Tech: ,WoodT			
Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JQGRV-1-AA J7C050150-1-SAMP	0.27g,in	0.27g	NITA2356 03/06/07	160						
03/01/2007 08:35	AmtRec: 2X100G	#Containers: 2					Scr:	Alpha:	Beta:	
2 JQGR6-1-AA J7C050150-2-SAMP	0.25g,in	0.25g	NITA2357 03/06/07							
03/01/2007 09:40	AmtRec: 2X100G	#Containers: 2					Scr:	Alpha:	Beta:	
3 JQGR6-1-AF-X J7C050150-2-DUP	0.26g,in	0.26g	NITA2358 03/06/07	218 07						
03/01/2007 09:40	AmtRec: 2X100G	#Containers: 2					Scr:	Alpha:	Beta:	
4 JQGR7-1-AA J7C050150-3-SAMP	0.25g,in	0.25g	NITA2359 03/06/07							
03/01/2007 10:25	AmtRec: 2XJAR60MLG	#Containers: 2					Scr:	Alpha:	Beta:	
5 JQGTC-1-AA J7C050150-4-SAMP	0.27g,in	0.27g	NITA2360 03/06/07							
03/01/2007 12:32	AmtRec: 2XJAR60MLG	#Containers: 2					Scr:	Alpha:	Beta:	
6 JQGTH-1-AA J7C050150-5-SAMP	0.28g,in	0.28g	NITA2361 03/06/07							
03/01/2007 08:35	AmtRec: 2XJAR60MLG	#Containers: 2					Scr:	Alpha:	Beta:	
7 JQGTP-1-AA J7C050150-6-SAMP	0.26g,in	0.26g	NITA2362 03/06/07							
02/28/2007 07:30	AmtRec: 2XJAR60MLG	#Containers: 2					Scr:	Alpha:	Beta:	
STL Richland Key: In - Initial Amt, f - Final Amt, d - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailled Added ISV - Insufficient Volume for Analysis WO Cnt: 7 Prep_SamplePrep v4.8.26										

3/8/2007 6:49:56 AM		Sample Preparation/Analysis						Balance Id:1120373922		
108302, Fluor Hanford Inc Hanford Inc		Flour	AF NI-63 PrpRC5013/5019, SepRC5069 S4 Nickel by ICP and Nickel-63 by Liquid Scint SI CLIENT: HANFORD				Pipet #: _____ Sep1 DT/Tm Tech: _____ Sep2 DT/Tm Tech: _____ Prep Tech: ,WoodT			
AnalyDueDate: 03/16/2007		Batch: 7064434 SOIL	pCi/g	PM, Quote: SA , 50639						
SEQ Batch, Test: None										
Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliquot Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JQGTT-1-AA J7C050150-7-SAMP	0.27g,in	0.27g	NITA2363 03/06/07	100						
03/01/2007 08:42	AmRec: 2XJAR80MLG	#Containers: 2							Scr: Alpha: Beta:	
9 JQGTO-1-AA J7C050150-8-SAMP	0.25g,in	0.25g	NITA2364 03/06/07							
03/01/2007 13:45	AmRec: 2XJAR80MLG	#Containers: 2							Scr: Alpha: Beta:	
10 JQG5P-1-AA-B J7C050000-434-BLK	0.28g,in	0.28g	NITA2365 03/06/07							
03/01/2007 09:40	AmRec:	#Containers: 1							Scr: Alpha: Beta:	
11 JQG5P-1-AC-C J7C050000-434-LCS	0.27g,in	0.27g	NISA0733 10/27/06,pd 05/18/05,							
03/01/2007 09:40	AmRec:	#Containers: 1							Scr: Alpha: Beta:	
12 JQG5P-1-AD-BN J7C050000-434-IBLK	AmRec:	#Containers: 1								
Comments: Samples have been muffled and bombarded										
All Clients for Batch: 108302, Fluor Hanford Inc Flour Hanford Inc SA , 50639										
JQGTVIAA-SAMP Constituent List: Ni-63 RDL:30 pCi/g LCL:170 UCL:130 RPD:35										
STL Richland Key: in - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2 ISV - Insufficient Volume for Analysis Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailled Added WO Cnt: 12 Prep_SamplePrep v4.8.26										

3/15/2007 3:46:19 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/15/2006, 3/20/2007, Batch: '7064434', User: 'ALL Order By Date/TimeAccepting'

Q Batch	Work Ord	CurStatus	Accepting	Comments
7064434				
AC	CalcC	WoodT	3/6/2007 11:20:07	
SC	wagarr	IsBatched	3/6/2007 3:10:18 PM	ICOC_RADCALC v4.8.26
SC	WoodT	InPrep	3/6/2007 11:20:07 AM	RICH-RC-5013 Revision 5
SC	WoodT	Prep2C	3/6/2007 6:47:20 AM	RICH-RC-5019 REVISION 5
SC	FABREM	Sep1C	3/13/2007 5:21:12 PM	RICH-RC-5069 REVISION 5
SC	DAWKINSO	InCnt1	3/13/2007 5:35:09 PM	RICH-RD-0001 REVISION 3
SC	BlackCL	CalcC	3/15/2007 6:48:20 AM	RICH-RD-0001 REVISION 3
AC	WoodT		3/8/2007 6:47:20 AM	
AC	FABREM		3/13/2007 5:21:12 PM	
AC	DAWKINSO		3/13/2007 5:35:09 PM	
AC	BlackCL		3/15/2007 6:48:20	

AC: Accepting Entry, SC: Status Change

STL Richland

Richland Wa.

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Grp Rec Cnt:5

ICOCFractions v4.8.26

STL RICHLAND

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